

**In the Claims:**

Cancel Claims 1-10, and insert therefor new Claims 11-20, to read as follows:

- A2
11. A process for the production of a printed substrate, comprising the steps of:
- (i) imagewise applying to a substrate a printing paste comprising:
    - (1) a matrix-forming condensate comprising polyorganosiloxanes, prepared by a sol-gel process, and
    - (2) at least one filler selected from the group consisting of coloring, luminescent, conductive, and catalytically active fillers; and
  - (ii) densifying the imagewise-applied paste to form the matrix containing the at least one filler by heat treatment at a temperature below the glass transition temperature of the thus-formed matrix.
12. The process of claim 11 where the step of densifying comprises heat treatment at a temperature that is at least 200 °C below the glass transition temperature of the thus-formed matrix.
13. The process of claim 11 where the step of imagewise applying the printing paste comprises screen printing or pad printing.
14. The process of claim 11 where the substrate is a glass substrate, a glass-ceramic substrate, or a ceramic substrate, any of which optionally has been provided with a conductive coating.
15. The process of claim 11 where the printed substrate is a substrate printed with conductor tracks, spacers, or a decorative pattern.

16. A composition comprising:

(a) a matrix-forming condensate comprising polyorganosiloxanes, prepared by a sol-gel process comprising partial hydrolysis and polycondensation of:

A1 (A) at least one organosilane of the formula  $R_nSiX_{(4-n)}$ , where each R is independently a non-hydrolyzable radical, each X is independently a hydrolyzable group or a hydroxy group, and n is 1, 2, or 3; or an oligomer derived therefrom,

(B) optionally, at least one hydrolyzable silane of the formula  $SiX_4$ , where each X is as defined above, and

(C) optionally, one or more compounds of glass-forming elements;

(b) at least one filler selected from the group consisting of coloring, luminescent, conductive, and catalytically active fillers;

(c) at least one organic solvent having a boiling point of at least 150 °C; and

(d) at least one rheology control agent.

17. The composition of claim 16 where the organosilane (A) comprises at least 40 mol% of the components (A) through (C) forming the condensate.

18. The composition of claim 16 where a filler is present and is selected from the group consisting of dyes, colored pigments, photoluminescent substances, electroluminescent substances, electrically conductive materials, photoconductive materials, and catalytically active fillers.